

**TEST REPORT ON FINE AGGREGATES**

Date. :15-12-2022

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-1)- 1963 RA 2016

Material description : Sand

Date of Receipt of Sample :15-12-2022

Date of testing :15-12-2022

TEST RESULTS

Total Wt. of Aggregates in gms

1500

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	115	115	7.67	92.33	90-100
2.36	165	280	18.67	81.33	75-100
1.18	386	666	44.40	55.60	55-90
600 Micron	269	935	62.33	37.67	35-59
300 Micron	292	1227	81.80	18.20	8-30
150 Micron	155	1382	92.13	7.87	0-10

Remarks : The above tested Sample Confirms as per IS Specifications.**Notes:-**

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TEST REPORT ON COARSE AGGREGATES

Date: 15-12-2022

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-1)- 1963 RA 2016

Material description : 20mm Coarse Aggregates

Date of Receipt of Sample : 15-12-2022

Date of testing : 15-12-2022

TEST RESULTS

Total Wt. of Aggregates in gms

5000

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Requirements as per IS 383:2021
40	0	0	0	100	100
20	220	220	4.40	95.60	95-100
10	2681	2901	58.02	41.98	25-55
4.75	1710	4611	92.22	7.78	0-10

Remarks : The above tested Sample Confirms as per IS Specifications.

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ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಇಂಜಿನಿಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬೆಂಗಳೂರು-92



TEST REPORT ON COARSE AGGREGATES

Date: 15-12-2022
Client Name: Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
*Contractor Name: M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main,
Project Name: Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference: EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name: Shiprama Consulting Engineers
Technical Reference: IS 2386 (Part-1)- 1963 RA 2016
Material description: 40mm Coarse Aggregates
Date of Receipt of Sample: 15-12-2022
Date of testing: 15-12-2022

TEST RESULTS

Total Wt. of Aggregates in gms 15000

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Requirements as per IS 383:2021
80	0	0	0	100	100
40	525	525	3.50	96.50	95-100
20	8155	8680	57.87	42.13	30-70
10	3250	11930	79.53	20.47	10-35
4.75	2485	14415	96.10	3.90	0-5

Remarks : The above tested Sample Confirms as per IS Specifications.

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[Signature]

[Signature]
ಪ್ರಾಧಿಕಾರ ಪಡೆದ ಅಧಿಕಾರಿ
ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಎಂಜಿನಿಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬೆಂಗಳೂರು - 92



TEST REPORT ON CEMENT

Date. : 15-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1 st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru -560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS-4031 (Part -1, 3, 4, 5 & 6) 1988 (RA-2014)
Material description : Birla Super OPC 53 grade Cement
Date of Reciept of Sample : 15-12-2022
Date of testing : 15-12-2022

TEST RESULTS

Sl.No	Physical Parameters	Test Results	Requirements as per IS: 269-2020
1	Consistency	30.00%	-
2	Initial Setting Time	140 minutes	Not Less than 30 Minutes
3	Final Setting Time	320 minutes	Not More than 600 Minutes
4	Soundness by Le - Chatelier's Method	1 mm	Not more than 10mm
5	Fineness by Dry Sieving Method	5.10%	Not more than 10%

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ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಎಂಜಿನೀಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್



SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED

(MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

TEST REPORT ON PRECAST SLAB

Date: 10-1-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Precast Slab 100mm thick

Date of Receipt of Sample : 10-1-2023

Date of testing : 10-1-2023

TEST RESULTS

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m ³)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm ²)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm ²)	Equivalent Cube Compressive Strength (N/mm ²)
1	50.00	80.00	0.416	2648.338	1.60	0.960	28.59	14.56	15.00	14.32	17.90
2	50.00	80.50	0.417	2638.216	1.61	0.960	26.80	13.65	14.06	14.90	18.63
3	50.00	70.00	0.395	2873.884	1.40	0.960	27.83	14.17	14.60	13.56	16.95

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ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಬೆಂಗಳೂರು
ಕೊಡಗೇಂದ್ರ ಉಪನಿಗಮ
ಬೃಹತ್ ಮಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92





TEST REPORT ON KERB STONE

Date. : 20-1-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayana, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Kerb Stone - M20

Date of Reciept of Sample : 20-1-2023

Date of testing : 20-1-2023

TEST RESULTS

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m ³)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm ²)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm ²)	Equivalent Cube Compressive Strength (N/mm ²)
1	50.00	70.50	0.386	2788.485	1.41	0.960	32.45	16.53	17.85	17.13	21.42
2	50.00	75.50	0.398	2684.765	1.51	0.960	33.50	17.06	18.43	17.69	22.11
3	50.00	80.00	0.411	2616.507	1.60	0.960	34.20	17.42	18.81	18.06	22.57

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ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON CONCRETE CUBES

Date. : 20-3-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagar, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Cement Concrete

Age of Concrete : 7 Days

Grade of Concrete : M30

TEST RESULTS

Sl.No / Identification	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	20.3.2023	27.3.2023	8.290	519.4	23.08
2	20.3.2023	27.3.2023	8.300	520.5	23.13
3	20.3.2023	27.3.2023	8.345	528.3	23.48

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ಬೆಂಗಳೂರು-92

**TEST REPORT ON CONCRETE CUBES**

Date. : 27.3.2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No. 28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Cement Concrete

Age of Concrete : 7 Days

Grade of Concrete : M30

TEST RESULTS

Sl.No / Identification	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	20.3.2023	27.3.2023	8.302	505.8	22.48
2	20.3.2023	27.3.2023	8.301	522.4	23.22
3	20.3.2023	27.3.2023	8.310	518.4	23.04

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ಹಿರಿಯರಾದ ಶ್ರೀಮತಿ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92

**TEST REPORT ON CONCRETE CUBES****Date.** :17.4.2023**Client Name** : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92***Contractor Name** : Improvements to Roads and Drains at From Dasarahalli Mian Road to Coffee Board Layout Main Road in Ward no: 07 Bytarayanapura Sub Division.**Project Name** : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.**Letter Reference** EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022**PMC Name** : Shiprama Consulting Engineers**Technical Reference** : IS 516 - 1959 RA 2018**Material description** : Cement Concrete**Age of Concrete** : 28 Days**Grade of Concrete** : M30**TEST RESULTS**

Sl.No / Identification	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	20.3.2023	17.4.2023	8.286	755.6	33.58
2	20.3.2023	17.4.2023	8.299	749.7	33.32
3	20.3.2023	17.4.2023	8.303	758.1	33.69

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ಕೊಡಗನಹಳ್ಳಿ ರಾಜ್ಯದಿಫಾನ್
ಬೃಹತ್ ಮಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಮಂಗಳೂರು-92

**TEST REPORT ON CONCRETE CUBES**

Date. 20.4.2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

***Contractor Name** : Improvements to Roads and Drains at From Dasarahalli Mian Road to Coffee Board Layout Main Road in Ward no: 07 Bytarayanapura Sub Division.

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 516 - 1959 RA 2018

Material description : Cement Concrete

Age of Concrete : 28 Days

Grade of Concrete : M30

TEST RESULTS

Sl.No / Identification	* Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm ²)
1	20.3.2023	20.4.2023	8.298	745.8	33.15
2	20.3.2023	20.4.2023	8.316	759.5	33.76
3	20.3.2023	20.4.2023	8.323	749.6	33.32

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[Signature]
ಸಹಾಯಕ ಮೇಲ್ಮನುಷ್ಯರ ಅಧೀನದಲ್ಲಿ
ಕೊಡಿಕೊಂಡು ಬರುವುದು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED
(MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. :4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	22.85	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಕುಶಲಕರ್ಮಿಗಳ ಕುಶಲತೆ
ಪ್ರಮಾಣ ಪತ್ರ
ಬೆಂಗಳೂರು-92



TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No. 28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	24.10	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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ಕೆ.ಆರ್.ಎಸ್. ಕೆ.ಎಸ್.ಎಸ್.ಎಸ್.
ಬೃಹತ್ ಮಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಮಂಗಳೂರು-92

**DETERMINATION OF RATE OF SPREAD TACK COAT**

Date. : 31-03-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Location : Nethaji Nagar
Date of testing : 31-03-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2027	0.2027
Initial Wt of empty Plate (b)	Kg	1.628	1.628
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.685	1.687
Weight of Prime/Tack Coat (d=c-b)	Kg	0.0570	0.0590
Rate of spread of prime /tack coat	kg/Sq.m	0.281	0.291
Average	kg/Sq.m	0.286	
Specified Limit	kg/Sq.m	0.25 Kg/sq.m	

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***** End of the Report *****

ಸಹಾಯಕ ಮುಖ್ಯಮಂತ್ರಿ
ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



DETERMINATION OF RATE OF SPREAD TACK COAT

Date. : 31-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Location : Nethaji Nagar
Date of testing : 31-12-2022

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2029	0.2029
Initial Wt of empty Plate (b)	Kg	1.629	1.629
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.686	1.687
Weight of Prime/Tack Coat (d=c-b)	Kg	0.0570	0.0580
Rate of spread of prime /tack coat	kg/Sq.m	0.281	0.286
Average	kg/Sq.m	0.283	
Specified Limit	kg/Sq.m	0.25 Kg/sq.m	

Notes:-

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ಪ್ರಮಾಣಿತ ಕಾರ್ಯನಿರ್ವಾಹಕರು
ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಇಂಜಿನಿಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92

**TEST REPORT ON STABILITY OF MIX**

Date. : 30-3-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : MORTH Table 500-17
Material description : Bituminous Concrete
Date of Receipt of Sample : 30-3-2023
Date of testing : 30-3-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.75	10.05	9 Kn (min)
2	Marshal flow, mm	2.43	2.35	2 - 4
3	Percent air voids in Mix	12.22	12.55	11 - 13
4	Percent voids in mineral aggregates	4.36	4.22	3 - 5
5	Percent voids filled with Bitumen	68.31	69.51	65 - 75
6	Density, g/cc	2.25	2.23	-

Notes:-

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***** End of the Report *****

ಸಹಾಯಕ ಮಹಾನ್ಯಾಧೀಶರು
ಪೊದೆಗುಡ್ಡ, ಬೆಂಗಳೂರು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON STABILITY OF MIX

Date. :30-12-2022

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : MORTH Table 500-17

Material description : Bituminous Concrete

Date of Receipt of Sample :30-12-2022

Date of testing :30-12-2022

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.70	10.20	9 Kn (min)
2	Marshal flow, mm	2.50	2.45	2 - 4
3	Percent air voids in Mix	12.55	12.59	11 - 13
4	Percent voids in mineral aggregates	4.25	4.29	3 - 5
5	Percent voids filled with Bitumen	69.55	69.56	65 - 75
6	Density, g/cc	2.24	2.26	-

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಅಭಿಯಂತರರು,
ಕೊಡಗೇನಹಳ್ಳಿ ಉಪವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. :30-03-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Receipt of Sample : 30-03-2023
Date of testing : 30-03-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3737.5	3736.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2454.0	2463.0
3	Weight of Saturated aggregate in water (in gms) = (A1-A2)	A	1283.5	1273.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2006.5	2007
5	Weight of oven dry Aggregate (in gms)	C	1995.5	1997.0

Result : 1. Specific gravity = $(C/B-A)$ 2.76 2.72
2. Water Absorption in Percentage = $(B-C*100/C)$ 0.55 0.50

Remarks: Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

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***** End of the Report *****

ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಬೆಂಗಳೂರು
ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಎಂಜಿನೀಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬುಲೆಟ್ ಕೃಷ್ಣಪ್ಪ ಲೇಔಟ್, ತಿಂದಲು, ವಿದ್ಯಾನಾರಾಯಣಪುರ, ಬೆಂಗಳೂರು-560091





TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date: :30-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bulleet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Receipt of Sample : 30-12-2022
Date of testing : 30-12-2022

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3734.0	3736.5
2	Weight of Empty Basket suspended in Water (in gms)	A2	2455.0	2467.0
3	Weight of Saturated aggregate in water (in gms) = (A1-A2)	A	1279.0	1269.5
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007	2009
5	Weight of oven dry Aggregate (in gms)	C	1996.0	1996.5

Result : 1. Specific gravity = $(C/B-A)$ 2.74 2.70
2. Water Absorption in Percentage = $(B-C*100/C)$ 0.55 0.63

Remarks: Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

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***** End of the Report *****



ಶ್ರೀಮತಿ ಸಂಪತ್ ಕುಮಾರ್
ಪ್ರಾಧಿಕಾರ ಪಡೆದವಳು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON FLAKINESS & ELONGATION

Date: :30-03-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92
*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Ben
560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Reciept of Sample :30-03-2023
Date of testing :30-03-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 500-17
1	Flakiness Index	17.50%	Maximum allowable Flakiness & Elongation Index for Bituminous Concrete is 30%
2	Elongation Index	13.20%	

Combined Flakiness & Elongation

30.70%

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

Notes:-

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಅಭಿಯಂತರರು
ಹೊಡಗೇದ್ಕೆ ಉಪವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON FLAKINESS & ELONGATION

Date. :30-12-2022

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 500-17

Material description : Bituminous Concrete

Date of Receipt of Sample :30-12-2022

Date of testing :30-12-2022

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 500-17
1	Flakiness Index	16.80%	Maximum allowable Flakiness & Elongation Index for Bituminous Concrete is 30%
2	Elongation Index	13.55%	
Combined Flakiness & Elongation		30.35%	

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯ ನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು
ಕೊಡಗನಹಳ್ಳಿ ಉಪವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON BITUMEN

Date. : 30-3-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 73 -2013
Material description : VG 30 Bitumen
Date of Reciept of Sample : 30-3-2023
Date of testing : 30-3-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Bituminous Concrete

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ⁰ C, 1/10 mm	57	Min 45
2	Softening point, ⁰ C	48	Min. 47
3	Ductility at 27 ⁰ C, cm	> 100	Min. 40
4	Flash Point, ⁰ C	364	Min. 220

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ-ರಸ್ತೆಬರವು
ಕೊಡಗೇಂದ್ರ ಉಪವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON BITUMEN

Date. : 30-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 73 -2013
Material description : VG 30 Bitumen
Date of Receipt of Sample : 30-12-2022
Date of testing : 30-12-2022

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Bituminous Concrete

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 °C, 1/10 mm	59	Min 45
2	Softening point, °C	49	Min. 47
3	Ductility at 27°C, cm	> 100	Min. 40
4	Flash Point, °C	363	Min. 220

Notes:-

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಬೈತರಾಯಪುರ
ಕೊಡಗನಹಳ್ಳಿ ರಸ್ತೆ, ಬೆಂಗಳೂರು-92
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 30-3-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Receipt of Sample : 30-3-2023
Date of testing : 30-3-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	375	374	376	21.69
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	80	83	81	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	295	291	295	
4	Aggregate Impact value = percent fines	21.33	22.19	21.54	
	$100 * (W_2/W_1) \%$				

Remarks: Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%

Notes:-

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***** End of the Report *****



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ: ಅಭಿಯಂತರರು
 ಕೊಡಗನಹಳ್ಳಿ ಉಪವಿಭಾಗ
 ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
 ಬೆಂಗಳೂರು-92



TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 30-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2020, MORTH Table 500-17
Material description : Bituminous Concrete
Date of Receipt of Sample : 30-12-2022
Date of testing : 30-12-2022

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	375	374	378	21.83
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	83	82	81	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	292	292	297	
4	Aggregate Impact value = percent fines	22.13	21.93	21.43	
	$100 * (W_2/W_1)\%$				

Remarks: Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಎಂಜಿನಿಯರ್
ಹಿರಿಗಣಿಸಿ ಸಮೀಕ್ಷಿಸಿ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON GRADATION

Date. : 30-03-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains at From Dasarahalli Mian Road to Coffee Board Layout Main Road in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2020, MORTH Table 500-17
Location : Nethaji Nagar
Material description : Bituminous Concrete
Sample : 30-03-2023
Date of testing : 30-03-2023

TEST RESULTS

Total Wt. of Aggregates in gms

5100

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	220	220	4.31	95.69	90- 100
9.5	715	935	18.33	81.67	70 - 88
4.75	840	1775	34.80	65.20	53 - 71
2.36	420	2195	43.04	56.96	42 - 58
1.18	515	2710	53.14	46.86	34 - 48
0.6	545	3255	63.82	36.18	26 - 38
0.3	455	3710	72.75	27.25	18 - 28
0.15	465	4175	81.86	18.14	12 - 20
0.075	470	4645	91.08	8.92	4 - 10

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

Notes:-

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SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED

(MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

TEST REPORT ON GRADATION

Date. : 30-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No. 28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayana, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2020, MORTH Table 500-17
Location : Nethaji Nagar
Material description : Bituminous Concrete
Sample : 30-12-2022
Date of testing : 30-12-2022

TEST RESULTS

Total Wt. of Aggregates in gms		5100			
Sieve Size in mm	Weight retained	Cumulative weight	Percentage Cumulative	Percentage Passing	Specified Limits as per MORTH
19	0	0	0	100	100
13.2	218	218	4.27	95.73	90- 100
9.5	716	934	18.31	81.69	70 - 88
4.75	846	1780	34.90	65.10	53 - 71
2.36	410	2190	42.94	57.06	42 - 58
1.18	528	2718	53.29	46.71	34 - 48
0.6	542	3260	63.92	36.08	26 - 38
0.3	435	3695	72.45	27.55	18 - 28
0.15	485	4180	81.96	18.04	12 - 20
0.075	443	4623	90.65	9.35	4 - 10

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-17

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ಸಹಾಯಕ ಮುಖ್ಯ ಮಂತ್ರಿ
ಬೆಂಗಳೂರು ಮಹಾನಗರ
ಪುರ ಪಂಚಾಯತ್ ಮುಖ್ಯ ಮಂತ್ರಿ
ಬೆಂಗಳೂರು-92



SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED

(MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

Total Wt. of Aggregates in gms

471

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	30.6	30.6	6.50	93.50	90- 100
9.5	65.1	95.7	20.32	79.68	70 - 88
4.75	83.5	179.2	38.05	61.95	53 - 71
2.36	58.3	237.5	50.42	49.58	42 - 58
1.18	43.1	280.6	59.58	40.42	34 - 48
0.6	26.5	307.1	65.20	34.80	26 - 38
0.3	49.7	356.8	75.75	24.25	18 - 28
0.15	36.2	393	83.44	16.56	12 - 20
0.075	44.2	437.2	92.82	7.18	4 - 10

Total Wt. of Aggregates in gms

469.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	32.2	32.2	6.86	93.14	90- 100
9.5	45.5	77.7	16.55	83.45	70 - 88
4.75	86.5	164.2	34.97	65.03	53 - 71
2.36	65.4	229.6	48.90	51.10	42 - 58
1.18	79.6	309.2	65.86	34.14	34 - 48
0.6	28.6	337.8	71.95	28.05	26 - 38
0.3	35.3	373.1	79.47	20.53	18 - 28
0.15	23.8	396.9	84.54	15.46	12 - 20
0.075	55.3	452.2	96.32	3.68	4 - 10

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ಸಹಾಯಕ ಕಾರ್ಯ ನಿರ್ವಾಹಕರು
ಮೆಕ್ಯಾನಿಕಲ್ ಟೆಸ್ಟಿಂಗ್ ಲ್ಯಾಬೊರೇಟರಿ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಾರುಕಟ್ಟೆ ಕಾರ್ಪೊರೇಷನ್-92
ಬೆಂಗಳೂರು-92

**TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR BITUMINOUS CONCRETE**

Date. :31-03-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Location : Nethaji Nagar

Material description : Bituminous Concrete

Sample :31-03-2023

Date of testing :31-03-2023

TEST RESULTS**BITUMEN CONTENT**

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	471	469.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	29.00	30.50
7. Bitumen content in %	5.80	6.10
8. Average	5.95	



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ ಅಭಿಯಂತರರು.
ಕೊಡಗೇರಿಹಳ್ಳಿ ಉಪವಿಭಾಗ
ಪ್ರಕೃತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	30.6	30.6	6.52	93.48	90- 100
9.5	65.4	96	20.47	79.53	70 - 88
4.75	92.6	188.6	40.21	59.79	53 - 71
2.36	81.5	270.1	57.59	42.41	42 - 58
1.18	37.7	307.8	65.63	34.37	34 - 48
0.6	27.9	335.7	71.58	28.42	26 - 38
0.3	41.1	376.8	80.34	19.66	18 - 28
0.15	27.5	404.3	86.20	13.80	12 - 20
0.075	35.5	439.8	93.77	6.23	4 - 10

Total Wt. of Aggregates in gms

472

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-17
19	0	0	0	100	100
13.2	32.5	32.5	6.89	93.11	90- 100
9.5	46.6	79.1	16.76	83.24	70 - 88
4.75	85.7	164.8	34.92	65.08	53 - 71
2.36	72.6	237.4	50.30	49.70	42 - 58
1.18	67.6	305	64.62	35.38	34 - 48
0.6	35.1	340.1	72.06	27.94	26 - 38
0.3	34.5	374.6	79.36	20.64	18 - 28
0.15	30.6	405.2	85.85	14.15	12 - 20
0.075	36.7	441.9	93.62	6.38	4 - 10

Notes:-

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ಸಹಾಯಕ ಪ್ರಾಧಿಕಾರಿ
ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಇಂಜಿನಿಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬೆಂಗಳೂರು-92



**TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR BITUMINOUS
CONCRETE**

Date. : 31-12-2022
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH
Location : Amruthalli
Material description : Bituminous Concrete
Sample : 31-12-2022
Date of testing : 31-12-2022

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	469	472
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	31.00	28.00
7. Bitumen content in %	6.20	5.60
8. Average	5.90	

Total Wt. of Aggregates in gms

469



ಸಹಾಯಕ ಮಹಾಸಂಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು
ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಇಂಜಿನಿಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED (MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

TEST REPORT ON STABILITY OF MIX

Date: :4-2-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
Location : Nethaji Nagar
PMC Name : Shiprama Consulting Engineers
Technical Reference : MORTH Table 500-11
Material description : Dense Graded Bituminous Macadam
Date of Reciept of Sample :4-2-2023
Date of testing :4-2-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH (Table 500-11)
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.55	9.71	9 Kn (min)
2	Marshal flow, mm	2.65	2.74	2 – 4
3	Percent air voids in Mix	3.64	3.85	3 – 5
4	Percent voids in mineral aggregates	11.72	11.54	10-12
5	Percent voids filled with Bitumen	70.19	70.5	65 – 75
6	Density, g/cc	2.25	2.27	-

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 ಹಿರಿಗೇಡ್ಕೆ ಉಪವಿಭಾಗ
 ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
 ಬೆಂಗಳೂರು-92



**TEST REPORT ON STABILITY OF MIX**

Date. : 4-2-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
Location : Nethaji Nagar
PMC Name : Shiprama Consulting Engineers
Technical Reference : MORTH Table 500-11
Material description : Dense Graded Bituminous Macadam
Date of Receipt of Sample : 4-2-2023
Date of testing : 4-2-2023

TEST RESULTS

Sl.No	Description	Test Result		Requirement as per MORTH (Table 500-11)
		Trail 1	Trail 2	
1	Marshal Stability, Kn	9.6	9.7	9 Kn (min)
2	Marshal flow, mm	2.55	2.77	2 - 4
3	Percent air voids in Mix	3.65	3.80	3 - 5
4	Percent voids in mineral aggregates	11.74	11.75	10-12
5	Percent voids filled with Bitumen	70.12	70.25	65 - 75
6	Density, g/cc	2.23	2.24	-

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ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ
ಶಿಪ್ರಾಮಾ ಕನ್ಸಲ್ಟಿಂಗ್ ಇಂಜಿನಿಯರ್ಸ್ ಪ್ರೈವೇಟ್ ಲಿಮಿಟೆಡ್
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date: :4-2-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bulle Krishna Layout, Thindlu, Vidyanayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-10
Material description : Dense Graded Bituminous Macadam
Date of Receipt of Sample :4-2-2023
Date of testing :4-2-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3724.0	3725.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2474.5	2473.0
3	Weight of Saturated aggregate in water (in gms) = (A1-A2)	A	1249.5	1252.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007	2009
5	Weight of oven dry Aggregate (in gms)	C	1996.5	1998.0

Result : 1. Specific gravity = $(C/B-A)$ 2.64 2.64
 2. Water Absorption in Percentage = $(B-C*100/C)$ 0.53 0.55

Remarks: Maximum allowable Aggregate Water absorption value for Dense Graded Bituminous Macadam is 2.0%

Notes:-

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 ಸಿ.ಎಂ.ಎಸ್. ಸಂಸ್ಥೆ
 ಬೃಹತ್ ಕರ್ನಾಟಕ ಮಹಾನಗರ ಪಾಲಿಕೆ
 ಬೆಂಗಳೂರು-92



TEST REPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH Table 500-10

Material description : Dense Graded Bituminous Macadam

Date of Receipt of Sample : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Total Wt. of Sample = 2000 gms

Sl. No.	Description	Notation	Test Result	
			Trail 1	Trail 2
1	Weight of Aggregate Suspended in water with the Basket (in gms)	A1	3722.0	3722.0
2	Weight of Empty Basket suspended in Water (in gms)	A2	2475.0	2475.0
3	Weight of Saturated aggregate in water (in gms) = (A1-A2)	A	1247.0	1247.0
4	Weight of saturated surface dry aggregate in air (in gms)	B	2007.5	2008
5	Weight of oven dry Aggregate (in gms)	C	1996.0	1998.0

Result : 1. Specific gravity = $(C/B-A)$ 2.62 2.63
2. Water Absorption in Percentage = $(B-C*100/C)$ 0.58 0.50

Remarks: Maximum allowable Aggregate Water absorption value for Dense Graded Bituminous Macadam is 2.0%

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**TEST REPORT ON FLAKINESS & ELONGATION**

Date: :4-2-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 400-13
Material description : Dense graded Bituminous Macadam
Date of Receipt of Sample :4-2-2023
Date of testing :4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Flakiness Index	18.40%	Maximum allowable Flakiness & Elongat Dense graded Bituminous Macadam is 35%
2	Elongation Index	13.10%	
Combined Flakiness & Elongation		31.50%	

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ಪೇಟೆನಿಂಗ್ ಮತ್ತು ಉಪನಿರ್ದೇಶನ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92

**TEST REPORT ON FLAKINESS & ELONGATION**

Date: :4-2-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 400-13
Material description : Dense graded Bituminous Macadam
Date of Receipt of Sample : 4-2-2023
Date of testing : 4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Flakiness Index	17.00%	Maximum allowable Flakiness & Elongat Dense graded Bituminous Macadam is 35%
2	Elongation Index	12.30%	
Combined Flakiness & Elongation		29.30%	

Notes:-

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ಬೆಂಗಳೂರು ಮಹಾನಗರ
ಪುರ ಮಂಡಳಿ ಮಹಾನಗರ
ಬೆಂಗಳೂರು-92



**TEST REPORT ON BITUMEN**

Date. : 4-2-2023
Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
PMC Name : Shiprama Consulting Engineers
Technical Reference : IS 73 -2013
Material description : VG 30 Bitumen
Date of Reciept of Sample : 4-2-2023
Date of testing : 4-2-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Dense Bituminous Macadam

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ⁰ C, 1/10 mm	59	Min 45
2	Softening point, ⁰ C	48	Min. 47
3	Ductility at 27 ⁰ C, cm	> 100	Min. 40
4	Flash Point, ⁰ C	360	Min. 220

Notes:-

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***** End of the Report *****

ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಅಭಿವೃದ್ಧಿ
ಕೊಡಗೇವಳ್, ಬೆಂಗಳೂರು
ಬೃಹತ್ ಮಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON BITUMEN

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 73 -2013

Material description : VG 30 Bitumen

Date of Receipt of Sample : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

The results of the tests conducted on the bitumen sample using for Dense Bituminous Macadam

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 °C, 1/10 mm	58	Min 45
2	Softening point, °C	47	Min. 47
3	Ductility at 27 °C, cm	> 100	Min. 40
4	Flash Point, °C	361	Min. 220

Notes:-

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಅಭಿವೃದ್ಧಿ
ಪ್ರಾಧಿಕಾರ, ಬೆಂಗಳೂರು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED
(MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

DETERMINATION OF RATE OF SPREAD PRIME COAT

Date. : 5-2-2023
*Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92
Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayana, Bengaluru-560097
Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.
Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022
Location : Nethaji Nagar
PMC Name : Shiprama Consulting Engineers
Date of testing : 5-2-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2024	0.2024
Initial Wt of empty Plate (b)	Kg	1.629	1.628
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.768	1.768
Weight of Prime/Tack Coat (d=c-b)	Kg	0.1390	0.1400
Rate of spread of prime /tack coat	kg/Sq.m	0.687	0.692
Average	kg/Sq.m	0.689	
Specified Limit	kg/Sq.m	0.60 Kg/sq.m	

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*** End of the Report ***



ಸಹಾಯಕ ಮಹಾನ್ಯಾಧೀಶರು
ಪ್ರಾಥಮಿಕ ಮಹಾನ್ಯಾಧೀಶರು
ಬೃಹತ್ ಮಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಮಂಗಳೂರು-92



SHIPRAMA CONSULTING ENGINEERS PRIVATE LIMITED

(MECHANICAL TESTING LABORATORY DIVISION)

ISO 9001:2015 Certified Company

DETERMINATION OF RATE OF SPREAD PRIME COAT

Date: 5-2-2023

*Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No 28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

Location : Nethaji Nagar

PMC Name : Shiprama Consulting Engineers

Date of testing : 5-2-2023

Determination	Unit	Test No	
		1	2
Size of Plate (mxm)	mt	0.45 X 0.45	0.45 X 0.45
Area of Plate (a)	Sq.m	0.2023	0.2023
Initial Wt of empty Plate (b)	Kg	1.627	1.629
Final weight of plate after application of prime /Tack Coat (c)	Kg	1.768	1.768
Weight of Prime/Tack Coat (d=c-b)	Kg	0.1410	0.1390
Rate of spread of prime /tack coat	kg/Sq.m	0.697	0.687
Average	kg/Sq.m	0.692	
Specified Limit	kg/Sq.m	0.60 Kg/sq.m	

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*** End of the Report ***



ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಬೆಂಗಳೂರು
ಕೊಡುಗೆಯುಳ್ಳ ಕಾರ್ಯದರ್ಶಿ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92



TEST REPORT ON AGGREGATE IMPACT VALUE

Date. : 5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH table 500-10

Material description : Dense Graded Bituminous Macadam

Date of Receipt of Sample : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	380	389	22.62
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	89	85	87	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	296	295	302	
4	Aggregate Impact value = percent fines	23.12	22.37	22.37	
	$100 * (W_2/W_1) \%$				

Remarks : Maximum allowable Aggregate Impact value for Dense Graded Bituminous Macadam is 27%

Notes:-

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**TEST REPORT ON AGGREGATE IMPACT VALUE**

Date. : 5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2386 (Part-4)- 1963 RA 2016, MORTH table 500-10

Material description : Dense Graded Bituminous Macadam

Date of Reciept of Sample : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

SI No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	386	382	23.42
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	89	90	91	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	296	296	291	
4	Aggregate Impact value = percent fines	23.12	23.32	23.82	
	$100 * (W_2/W_1)\%$				

Remarks : Maximum allowable Aggregate Impact value for Dense Graded Bituminous Macadam is 27%

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TEST REPORT ON GRADATION

Date: 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

Location : Nethaji Nagar

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2016, MORTH Table 500-10

Material description : Dense Graded Bituminous Macadam

Date of Receipt of Sample : 4-2-2023

Sample

Date of testing : 4-2-2023

TEST RESULTS

Total Wt. of Aggregates in gms 13124

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	490	490	3.73	96.27	90 - 100
19	2300	2790	21.26	78.74	71 - 95
13.2	2501	5291	40.32	59.68	56 - 80
4.75	2630	7921	60.36	39.64	38 - 54
2.36	1350	9271	70.64	29.36	28 - 42
0.3	2382	11653	88.79	11.21	7 - 21
0.075	650	12303	93.74	6.26	2 - 8

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-10, Grading II

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TEST REPORT ON GRADATION

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

Location : Nethaji Nagar

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2016, MORTH Table 500-10

Material description : Dense Graded Bituminous Macadam

Date of Receipt of Sample : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Total Wt. of Aggregates in gms 13124

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	488	488	3.72	96.28	90 - 100
19	2265	2753	20.98	79.02	71 - 95
13.2	2446	5199	39.61	60.39	56 - 80
4.75	2544	7743	59.00	41.00	38 - 54
2.36	1290	9033	68.83	31.17	28 - 42
0.3	2441	11474	87.43	12.57	7 - 21
0.075	690	12164	92.69	7.31	2 - 8

Remarks: The above tested sample satisfies MORTH Specifications as per Table 500-10, Grading II

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Total Wt. of Aggregates in gms

476.5

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	31.5	31.5	6.61	93.39	90 - 100
19	52.2	83.7	17.57	82.43	71 - 95
13.2	35.9	119.6	25.10	74.90	56 - 80
4.75	125.6	245.2	51.46	48.54	38 - 54
2.36	68.4	313.6	65.81	34.19	28 - 42
0.3	85.6	399.2	83.78	16.22	7 - 21
0.075	48.4	447.6	93.93	6.07	2 - 8

Total Wt. of Aggregates in gms

477

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 500-10
37.5	0	0	0	100	100
26.5	32.6	32.6	6.83	93.17	90 - 100
19	59.6	92.2	19.33	80.67	71 - 95
13.2	36.5	128.7	26.98	73.02	56 - 80
4.75	129.8	258.5	54.19	45.81	38 - 54
2.36	64.5	323	67.71	32.29	28 - 42
0.3	83.5	406.5	85.22	14.78	7 - 21
0.075	54.4	460.9	96.62	3.38	2 - 8

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**TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR DENSE GRADED
BITUMINOUS MACADAM**

Date. : 5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

Location : Nethaji Nagar

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Material description : Dense Graded Bituminous Macadam

Date of Receipt of Sample : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

BITUMEN CONTENT

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	476.5	477
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	23.5	23.00
7. Bitumen content in %	4.70	4.60
8. Average	4.65	



Executive Engineer,
Bytarayanapura Division,
Sahakara Nagara,
Bangalore-92

**TEST REPORT ON BITUMEN CONTENT AND GRADATION FOR DENSE GRADED
BITUMINOUS MACADAM**

Date. : 5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

Location : Nethaji Nagar

Source of Sample : At Site

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, AASHTO T 164 & AASHTO T 30 & MORTH

Material description : Dense Graded Bituminous Macadam

Date of Receipt of Sample : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS**BITUMEN CONTENT**

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475.5	478
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	24.5	22.00
7. Bitumen content in %	4.90	4.40
8. Average	4.65	



ಮಾನ್ಯ ಸಾರ್ವಜನಿಕ ಕಾರ್ಯದರ್ಶಿ
ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್
ಬೃಹತ್ ನಗರೀಕರಣ ಮತ್ತು ಸಾರ್ವಜನಿಕ ಕಾರ್ಯ
ಬೆಂಗಳೂರು-92



TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM

Date. : 5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	18.00%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	13.20%	
Combined Flakiness & Elongation		31.20%	

Notes:-

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ಸಹಕಾರಿ ಮಾರ್ಗದರ್ಶಿ ಸಂಸ್ಥೆ
ಬೆಂಗಳೂರು ಮಂಡಳಿ
ಬೃಹತ್ ಕೃಷ್ಣಪ್ಪ ಲೇಔಟ್
ಬೆಂಗಳೂರು-92



TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No. 28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	17.50%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	12.80%	
Combined Flakiness & Elongation		30.30%	

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ಸಹಕಾರಿ ಸಂಸ್ಥೆಗಳ ಸಂಘದ
ಪ್ರಾಧಿಕಾರದ ಅಡಿಯಲ್ಲಿ
ಪ್ರತಿ ಪರೀಕ್ಷಾ ನಮೂನೆಗೆ
ಪರಿಶೀಲಿಸಲಾಗಿದೆ

**TEST REPORT ON FLAKINESS & ELONGATION OF WET MIX MACADAM**

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayana, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2386(part 1)-1963 RA 2016, MORTH Table 400-12

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-12
1	Flakiness Index	18.25%	Maximum allowable Flakiness & Elongation Index for Wet Mix macadam is 35%
2	Elongation Index	13.30%	
Combined Flakiness & Elongation		31.55%	

Notes:-

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ಸಹಕಾರಿ ಸಂಸ್ಥೆಗಳ ಸಂಘದ
ಉಪನಿರ್ದೇಶಕರು
ಬುಲೆಟ್ ಕ್ರಿಶ್ಣಪ್ಪ ಲೇಔಟ್
ಬೆಂಗಳೂರು-92

**TEST REPORT ON AGGREGATE IMPACT VALUE OF WET MIX MACADAM**

Date. : 5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	380	378	381	21.77
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	82	81	85	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	298	297	296	
4	Aggregate Impact value = percent fines $100 * (W_2/W_1)\%$	21.58	21.43	22.31	

Remarks: Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

Notes:-

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(Signature)
Sri Venkateshwara Constructions
Prop. Sri Sambashiva
No. 28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097



TEST REPORT ON AGGREGATE IMPACT VALUE OF WET MIX MACADAM

Date: 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyananyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing

TEST RESULTS

Sl No.	Details	Trial No.			Average
		1	2	3	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	370	380	21.87
2	Weight of aggregate passing 2.36 mm sieve after the test = W_2 g	82	84	83	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	307	286	297	
4	Aggregate Impact value = percent fines	21.08	22.70	21.84	
	$100 * (W_2/W_1)\%$				21.87

Remarks: Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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TEST REPORT ON GRADATION OF WET MIX MACADAM

Date: :5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	528	528	3.08	96.92	95-100
22.4	3693	4221	24.65	75.35	60-80
11.2	3100	7321	42.75	57.25	40-60
4.75	3500	10821	63.19	36.81	25-40
2.36	2695	13516	78.93	21.07	15-30
0.6	1595	15111	88.24	11.76	8-22
0.075	1673	16784	98.01	1.99	0-5

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

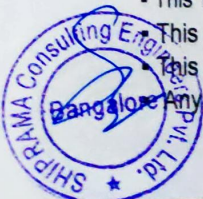
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TEST REPORT ON GRADATION OF WET MIX MACADAM

Date: :5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	520	520	3.04	96.96	95-100
22.4	3684	4204	24.55	75.45	60-80
11.2	3279	7483	43.70	56.30	40-60
4.75	3534	11017	64.33	35.67	25-40
2.36	2769	13786	80.50	19.50	15-30
0.6	1513	15299	89.34	10.66	8-22
0.075	1570	16869	98.51	1.49	0-5

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

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[Signature]

[Signature]
Sri Venkateshwara Constructions
Prop. Sri Sambashiva
No.28/A, 1st Main,
Bullet Krishnappa Layout, Thindlu,
Vidyanarayapura, Bengaluru-560097



TEST REPORT ON GRADATION OF WET MIX MACADAM

Date: 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	519	519	3.03	96.97	95-100
22.4	3755	4274	24.96	75.04	60-80
11.2	3456	7730	45.14	54.86	40-60
4.75	3765	11495	67.12	32.88	25-40
2.36	2971	14466	84.47	15.53	15-30
0.6	1010	15476	90.37	9.63	8-22
0.075	1412	16888	98.62	1.38	0-5

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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TEST REPORT ON GRADATION OF WET MIX MACADAM

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyanarayapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

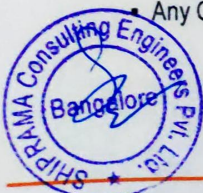
Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	521	521	3.04	96.96	95-100
22.4	3525	4046	23.63	76.37	60-80
11.2	3101	7147	41.73	58.27	40-60
4.75	3620	10767	62.87	37.13	25-40
2.36	2901	13668	79.81	20.19	15-30
0.6	1653	15321	89.47	10.53	8-22
0.075	1401	16722	97.65	2.35	0-5

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಶಿವಪ್ರಸಾದ್ ಎಂ.ಎಸ್.ಎಸ್.
ಇಂಜಿನಿಯರ್, ಮೆಕ್ಯಾನಿಕಲ್
ಪ್ರಾಜೆಕ್ಟ್ ಮೇನೇಜರ್ ಮತ್ತು
ಲೇಬರ್ ಇಂಜಿನಿಯರ್
ಬೆಂಗಳೂರು-92



TEST REPORT ON GRADATION OF WET MIX MACADAM

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Shankara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated: 04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS 2720 (Part-4)- 1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Reciept of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Total Wt. of Aggregates in gms 17125

Sieve Size in mm	Weight retained (gms)	Cumulative weight retained (gms)	Percentage Cumulative weight retained (%)	Percentage Passing (%)	Specified Limits as per MORTH Table 400-13
53	0	0	0	100	100
45	520	520	3.04	96.96	95-100
22.4	3660	4180	24.41	75.59	60-80
11.2	3100	7280	42.51	57.49	40-60
4.75	3625	10905	63.68	36.32	25-40
2.36	2800	13705	80.03	19.97	15-30
0.6	1510	15215	88.85	11.15	8-22
0.075	1630	16845	98.36	1.64	0-5

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಪ್ರಾಜೆಕ್ಟ್ ಮ್ಯಾನೇಜರ್
ಬಿ.ಎಂ.ಎಸ್.ಎಸ್.ಎಸ್.ಎಸ್.ಎಸ್.
ಬೆಂಗಳೂರು-92



TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM

Date: :5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	24.50	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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SHRIMATI SRI VENKATESHWARA CONSTRUCTIONS
Prop. Sri Sambashiva
No.28/A, 1st Main
Bullet Krishnappa Layout, Thindlu
Vidyaranyapura, Bengaluru-560097

**TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM**

Date: :5-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

*Contractor Name : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

Project Name : Improvements to Roads and Drains of Nethajinagar and Surrounding Areas in Ward no: 07 Bytarayanapura Sub Division.

Letter Reference EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Receipt of : 5-2-2023

Date of testing : 5-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	24.00	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಸಹಾಯಕ ಮಹಾಸೇವಕರು
ಪ್ರಾಥಮಿಕ ಮಹಾಸೇವಕರು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92

**TEST REPORT ON ATTERBERG LIMITS OF WET MIX MACADAM**

Date. : 4-2-2023

Client Name : Executive Engineer, Bytarayanapura Division, No 2152/20, Defence Colony, Sahakara Nagara, Bangalore-92

***Contractor Name** : M/s Sri Venkateshwara Constructions, Prop. Sri Sambashiva, No.28/A, 1st Main, Bullet Krishnappa Layout, Thindlu, Vidyaranyapura, Bengaluru-560097

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Letter Reference : EE/BTP/BBMP/E-PMT/10/2022-23, Dated:04-07-2022

PMC Name : Shiprama Consulting Engineers.

Technical Reference : IS:2720 (part 5)-1985 RA 2015, MORTH Table 400-13

Location : Nethaji Nagar

Material description : Wet Mix Macadam

Date of Reciept of : 4-2-2023

Date of testing : 4-2-2023

TEST RESULTS

Sl. No.	Particulars	Test Results	Standards as per Specifications As per MORTH Table 400-13
1	Liquid Limit	23.20	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

Remarks: The above tested sample satisfies MORTH Specifications as per Table 400-13

Notes:-

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ಸಹಾಯಕ ಕಾರ್ಯದರ್ಶಿ, ಅಭಿವೃದ್ಧಿ
ಶಿಬಿರದಲ್ಲೇ ಉಪವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು-92